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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,521	01/23/2002	Mitsumasa Tanaka	06270007AA	7726

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EXAMINER	
HANEY, MATTHEW J	

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,521	TANAKA, MITSUMASA	
	Examiner	Art Unit	
	Matthew Haney	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-37 and 39 is/are rejected.

7)☒ Claim(s) 38 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

1. Claims 7, 27, and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

2. Claims 7 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims contain a run-on sentence that leads to the inability to correctly decipher the claim language (first paragraphs in the respective claims).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 8-9, 11-23, 26, 28-29, 31-37, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Setogawa (US 5,822,024).

As for claims 1 and 19, Setogawa teaches of an image encoder which codes

each of frames of image data into one of thee first type image frame, the second type image frame, and the third type image frame (Column 5, Lines 1-68); an image decoder which decodes the image frame coded by said image coder (Column 6, Lines 21-68); an image data analyzer which determines types of image frames included in each group, wherein: said image data analyzer (i.e. Cut detection, Figure 13, Reference Number 169 and Column 14, Lines 1-39) determines whether or not a head group which is arranged at a head of an editing target area included in the image data is a closed group which does not include the third type image frame which is to be decoded by referring to an image frame included in a group which is arranged before the head group; in a case where said image data analyzer determines that the head group is not the closed group, said image coder converts a portion near the head of the editing target area into the closed group (Column 11, Lines 1-14).

As for claim 2, Setogawa teaches of a data analyzer determines whether or not the third type image frame included in the head group is an image frame which is to be decoded by referring to all image frame included in a group which is arranged before the head group (Column 11, Lines 1-14).

As for claims 3 and 20 most of the limitations of the claims are discussed in the above rejection of claims 1 and 6. Setogawa teaches of in a case where said image data analyzer determines that the third type image frame is to be decoded by referring to all image frame included in the group arranged before the head group, the image decoder decodes the third type image frame; said image coder codes the third type image frame which is determined by said image data analyzer as an image frame to be

decoded by referring to an image frame included in the group arranged before the head group, and is decoded by said image decoder, into an image frame which is able to be decoded without referring to an image frame included in the group arranged before the head group (Column 11, Lines 1-14).

As for claims 4, 5, 12, 18, 21, 22, 32, and 39 most of the limitations of the claims have been discussed in the above rejection of claims 1, 6, 13, 19, 26, and 33. Setogawa teaches of said image coding method is an MPEG method; each of the groups is a GOP of MPEG; the first type image frame is an I picture; the second type image frame is a P picture; and the third type image frame is a B picture (Column 10, Lines 45-68).

As for claim 6, 8, 23, 26, and 28 most of the limitations of the claims have been discussed in the above rejection of claim 1. Setogawa also teaches of said image encoder re-codes the image frames which are created by decoding the head image frame and each image frame appearing between the head image frame and the first type image frame which appears first after the head image frame, and re-codes the head image frame into the first type image frame and re-codes any of the third type image frame appearing after the head image frame into an image frame which is able to be decoded without referring to all image frame arranged before the head image frame (Note: the reference not only specifies that an I frame is added but also that all the B frames up until the next I frame and decoded and re-encoded to not depend on previous frames, Column 12, Lines 1-68 and Figure 12).

As for claims 9, 11, 29, and 31, most of the limitations of the claims have been discussed in the above rejection of claims 6 and 26. Setogawa also teaches of said image encoder re-codes the image frame which is created by decoding any of the third type image frame that appears after the head image frame into the third type image frame which is able to be decoded without referring to an image frame which is arranged before the head image frame (Column 10, Lines 61-68 and Column 11, Lines 1-14 and Figure 11).

As for claims 13 and 33, most of the limitations of the claim are contained in the above rejection of claim 9. Setogawa also teaches of wherein said image data analyzer determines whether a first condition that the first type image frame which appears first in an editing target area included in the image data coded in accordance with said image coding method is a head image frame which is arranged at a head of a group and a second condition that the group is a closed group which does not include the third type image frame which is to be decoded by referring to all image frame included in a group which is arranged before the group are satisfied or not (Note: Setogawa uses these conditions throughout his invention, Figures 6 a-c).

As for claims 14-16 34-36, most of the limitations of the claim are contained in the above rejection of claim 13 33. Setogawa teaches of the specified conditions in Figures 6a-c. In the cases where one or the other is not satisfied or where the first condition is met and the second condition is not met is shown in Figure 10.

As for claims 17 and 37, most of the limitations of the claim are contained in the above rejection of claims 13 and 33. Setogawa teaches of the case where both

conditions are met and the resulting action is that the image frames are simply copied (Note: if both conditions are met then there is no need to perform any arrangement, by definition the closed gop can be used on its own, Column 10, Lines 61-68 and Column 11, Lines 1-14).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Setogawa (US 5,822,024).

As for claims 24 and 25, most of the limitations of the claims are discussed in the above rejection of claim 23. Setogawa does not explicitly teach of the situation where the head image frame is a P frame, however, it is considered obvious to one of ordinary skill in the art at the time of the invention to treat the P frame in the same way as a B frame would be. Since the P frame and B frame both depend on previous frames it would be obvious that they must be replaced by an I frame in order for the GOP to be a "closed GOP". (Official Notice)

Claims 10 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Setogawa (US 5,822,024) in view of Sasaki (JP-08205174 A).

As for claims 10 and 30, most of the limitations of the claims are discussed in the above rejection of claims 6 and 26. Setogawa does not explicitly teach of said image encoder re-codes the image frame which is created by decoding any of the third type image frame that appears after the head image frame into the first type image frame, however, Takayuki does (Note: Figure 3 shows the B and P frames directly after the I frame being converted into all I frames). It would have been obvious to one of ordinary skill in the art at the time of the invention to re-code all the B and P frames with I frames because if an edit was being done where zooming was taking place the B and P frames would not be able to accurately predicted the video.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Haney whose telephone number is 703-305-4915. The examiner can normally be reached on M-Th (7-4:30), Every Other Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Haney
Examiner
Art Unit 2613

mjh

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